India

Summary

The total Indian water market is estimated to be over $1 billion. The government sector contributes a little more than 50 percent, with the rest of the business coming from the private industrial sector. The overall water market is growing at 10-12 percent annually, with even higher growth rates in the industrial and drinking water segments. Currently, 75 percent of the rural population and 85 percent of the urban population have access to public water supplies. However, municipal agencies in many Indian towns and cities are unable to increase their water supply capacities to match population growth, especially in the urban areas. India has poor and, in many areas, outdated transmission and distribution networks for water, and has limited financing available to upgrade its water supply and distribution infrastructure. Large water companies from all over the world have established a presence in India to pursue an estimated 70 projects worth several million dollars in 20 Indian cities spread over several states. U.S. companies can offer planning and administration of water supply projects with state level local urban bodies, as well as management of water supply distribution systems. They can also joint venture with Indian firms to offer integrated solutions in water supply and distribution.

Market Overview

India has 16 percent of the world's population, but comparatively only 2.5 percent of the earth's land mass and 4 percent of its water resources. These already limited water resources are depleting rapidly while at the same time the demands on them are increasing. India has intermittent drinking water supplies and poor transmission and distribution networks for water. In the absence of reliable data, industry sources estimate that the Indian water supply and distribution market is worth approximately $1 billion. According to a recent government assessment, the water requirement for industrial use will quadruple from the current 30 billion cubic meters to 120 billion cubic meters by 2025.

The total market demand for water sector is growing at 10-12 percent every year. The wastewater treatment market segment is highly fragmented and unorganized. Imports constitute approximately $110 million of the $690 million market for municipal and industrial water treatment equipment. The U.S. is India's principal source of imports of water treatment equipment, with an estimated share of 40 percent. A growing population has increased the demand for drinking water and rapid urbanization has required increased sewage treatment. Many industries had to adopt water-recycling systems due to the scarcity of water. Growing public concern, media pressure, and renewed legislation has left industries with no option but to install water treatment equipment. At the state and local level, there is a compulsory requirement of environment clearances from pollution control boards. The recent Supreme Court directive to move polluting units out of Delhi is also likely to act as an impetus to future sets of water

treatment equipment. In addition, many existing treatment plants will need to be replaced or upgraded to meet with more stringent standards.

Market Trends

India's National Water Policy allocates water use priorities in the following order: drinking, irrigation, hydroelectric power, ecology, agricultural and non-agricultural industries, navigation and other uses. The government currently spends approximately 3 percent of the national budget on investments to provide drinking water. As a result, 75 percent of the rural and 85 percent of the urban population currently have access to public water supplies.

The water supply, however, is a state subject. Multiple agencies are responsible for water supply, which leads to duplication and confusion. Some states have state-level water supply and sewerage boards, but also have city-level municipal corporations, which in some cases are also responsible for water supply. In yet another scenario, responsibility for water supply and distribution rests with the state public health and engineering departments.

India's National Water Policy of 2002 encourages private participation in the planning and operation of water systems. Water supply has been accorded "infrastructure" status. This makes water supply projects eligible for bank financing and a 10-year tax holiday. In the private sector, approximately 25 cities have initiated private water supply projects. However, very few have met with any success. Some states have handed over the operation of water networks in small towns to the private sector.

The biggest hurdles to improving the water supply network have been the poor financial health of urban local bodies and political considerations that keep water usage charges artificially low. Several government funds have been created to assist these bodies, but access to funds is conditional upon urban reforms being put in place. Some municipal bodies and water boards have also begun revising water charges upwards. In the multilateral agency arena, the Asian Development Bank, the World Bank and the Japan Bank for International Cooperation have promoted water projects. These have been developed as part of integrated urban development projects.

In 2003, the government announced a $100 billion project to interlink all major river networks in India. This initiative would connect water-deficit areas to water-abundant ones by interlinking 37 Indian rivers. One of the largest projects anywhere in the world, it would transfer water through 30 links across 9,600 kilometers. It would connect 32 dams and use 56 million tons of cement and 2 million tons of steel. It would bring with it a huge requirement for water management, transmission and distribution. The Ministry of Water Resources is responsible for laying down policy guidelines and programs for the development and regulation of water resources, which can be found at:
http://wrmin.nic.in/policy/nwp2002.pdf

Competition

Several international leaders have a presence in the Indian water market. Very large companies such as CH2MHILL, Vivendi (now Veolia Water), Suez de Lyonnaise (Degremont) and VA TECH Wabag have a presence. Large chemical companies such as Nalco and GE Betz Dearborn also have operations. Other international companies with a significant presence in the Indian water sector include Thames Water (U.K.), Dow Chemicals, Dupont, Emerson, Hydrnautics, Pentair (U.S.), Grundfos (Denmark), Endress + Hauser, KSB Pumps, Krohne, Netzsch (Germany), Schlumberger/Actaris (France), Amiantit, Aplaco (Saudi Arabia) and Metrohm (Switzerland).

Most foreign manufacturers of water sector equipment either have a presence in India or have ensured that their and products are easily available in India. For the leading foreign manufacturers, the technical expertise and know how that they offer is of a similar standard. Therefore, success in winning large project orders depends on aggressive pricing, project execution skills and the ability to engineer processes effectively. This trend is likely to strengthen in the coming years.

End Users

The principal end users in the water market are the municipal authorities and the Public Health Departments. The major industries connected with the water sector include cement, chemicals, fertilizers, food & beverage, paper, pharmaceuticals, power, refineries, sugar, tanneries and textiles. End user commercial establishments include hospitals, hotels and housing developments.

The government makes purchase decisions through a standard tendering process. The overriding consideration in government purchases is cost. The private sector is increasingly adopting lifecycle cost analysis for procurement decisions, especially in service-oriented industries such as healthcare and hotels.

The urban water sector is witnessing the growth of informal water markets. Municipal agencies in many Indian towns and cities are unable to increase their water supply capacities to match the growth of urban populations. The private provision of domestic water has emerged as a significant and growing economy in many Indian urban areas in the form of 'tanker water markets'.

Market Access

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By and large Indian standards follow international norms and do not constitute a significant challenge to expanding U.S. exports. In sectors where differences exist, India is trying to match national standards with international norms. No distinctions are made between foreign and domestically produced goods. Indian water safety standards are, however, in some cases more stringent than international norms.

The Bureau of Indian Standards is the national standards body of India responsible for formulation of Indian standards. Besides developing Indian Standards, BIS is involved with product certification, quality system certifications and testing.

Bottled water in India is governed by the IS 14543 standards. In April 2003, India notified stringent standards for bottled water, based on the recommendations of the Bureau. The standards included fixing the permissible limit of pesticides residues at 0.0001 mg per liter individually and 0.0005 mg per liter collectively in line with international standards. Bottled water was prescribed tests for 32 pesticides, using internationally established test methods. The notification also made it mandatory for manufacturers to produce a no objection certificate from the central or state government ground water authorities before they could be issued a license to bottle water. We understand the notification is currently under revision to reduce the number of pesticide categories to 26. Details of the second revision have not been made public at the time of writing this report. BIS does not publish the standards on their website because they sell them for a fee.